

XXIV.—On the Ornithology of Hainan.

By ROBERT SWINHOE, F.Z.S. &c.*

(Plate X.)

[Concluded from p. 256.]

77? *ORIOLOUS CHINENSIS*, Linn.

I introduce this Oriole into my list on the authority of Père Michel Chagot, the French priest, who resides at Lingshanshe, near the capital city. To this gentleman, Monsgr. Guillemain, the French bishop at Canton, had given me a letter of introduction. I found him in Chinese queue and costume, living in a wretched hovel, part of a small farm-house in a poor village about ten miles from Kiungchowfoo. He had been seven years in the island without leaving it, and had the cure of the western division of the north of the island, while another Frenchman had charge of the eastern division. The two met once in three months. The mission once had chapels in the city; but they had long since been seized; and the priests driven away. M. Chagot did his best to be hospitable; but I must confess that notwithstanding all his efforts, his board and his quarters showed small cheer. The life of a priest in Hainan is not an enviable one. After thus introducing my informant I will tell what he told me about the Oriole. He said that in the summer one of their commonest birds was a yellow bird about the size of a Thrush. This, I should think, was pretty certain to be the species that summers in China. We did not leave Hainan till the 4th of April; and up to that date there were no signs of the Oriole.

78. *PSAROPHOLUS ARDENS*, Swinhoe (Ibis, 1862, p. 363, pl. xiii.), *var. NIGELLICAUDA*.

* I find I have wrongly referred (*suprà*, p. 88) the small horned Owl of Hainan to *Ephialtes lettia* (Hodgs.). It is more nearly related to *E. griseus*, Jerd., from which, however, it differs in its proportions, by its much longer tarsus and longer toes, its much deeper and richer colouring, the want of the white spot on the underneck, and in having its tarsal feathers reddish brown barred and mottled with dark brown. I will distinguish it as *E. UMBRATILIS*.

On the 20th February, at Taipingsze (Central Hainan), I spied a solitary male Red Oriole, and, after much chasing from one wood to another, at last secured it. On taking it into my hand, from its blackened tail I thought I had got a new species. Its iris was yellowish cream-colour. A few days later, on my return to the same place, I was attracted by a bird singing to himself in loud broken notes, hidden in a forked branch of a high tree. I watched till I could see him, and brought down a young male. I saw a second red male in the jungle at Yulin-kan (South Hainan).

My specimens are shorter in the wing and longer in the tail than the Formosan bird; and in the full-plumaged bird the black of the neck appears to extend less far down the breast.

Adult male. Length of wing, 5·7; tail, of 12 slightly graduated feathers, 4·125. Plumage as in *P. ardens* of Formosa, except as regards the tail, which, instead of being entirely crimson, has black shafts to the feathers, the two middle ones being washed with black, and the rest with their outer webs for the most part black.

Young male. Length of wing, 5·6; tail, 4·125. Head and tibiæ blackish brown. Back brownish-red; scapulars, wings, sides of breast and belly, and axillaries brown. Throat, breast, and belly white, with long blackish-brown spots. Rump, vent, and a new feather or two on the breast crimson. Tail pale crimson; the two middle feathers entirely washed with brown, the rest only on their outer webs; shafts of feathers black.

I have a more advanced male from Formosa, with a black head and crimson back, but still retaining the spots of the under parts, in which the tail is more blackened than in the young Hainan specimen. But all the Formosan birds in as mature plumage as the Hainan adult have purely crimson tails. In the Formosan bird the black disappears, in the Hainan bird it intensifies, with age. ♣

79. *COPSYCHUS SAULARIS* (Linn.).

Common about villages in the flat open country of North and Western Hainan. My specimens agree with the bird that is found throughout China south of the Yangtsze, and with skins

from India. A skin from Java, sent me by Dr. Schlegel, and marked *C. saularis*, with *C. mindanensis* as a synonym, is about the same size, but has stronger legs and feet, and dusky tibiæ, with black axillaries. Another, from Mr. Blyth, from Malacca, marked *C. mindanensis*, is close to our bird in proportions, but has the black feathers of the axillaries fringed with white, whilst in *C. saularis* they are pure white. Considering that the true *C. saularis* extends from India to China unchanged, it strikes me that both the Malacca and Java forms may claim specific distinction. A Hainan male measures—wing 4 inches, tail 3·75; a female—wing 3·7, tail 3·635.

80. *CITTACINCLA MACRURA* (Gmel.), *var. MINOR*.

In the woods of Central Hainan, and in the jungles of the south, "*Shamas*" were often seen and heard, chasing one another about and singing defiantly. There was much sweetness and variety in their song. In habits *Cittacincla* bears the same relation to a *Copsychus* that a Nightingale does to a Red-breast. I have three males from Hainan; they agree with a bird from the Tenasserim sent by Mr. Blyth, but are much smaller than the typical Indian bird. They are in length about 9·5 in., wing 3·5, longest tail of the three skins 5·8. A Javan specimen from Dr. Schlegel is of the size of our bird, but has a much longer and broader tail. The "*Shama*" is called in the 'Gazetteer' "*Pih-shay*" or "*Hundred Tongues*":—"It begins to sing in spring; it can roll its tongue in imitation of the sounds of a hundred birds."

81. *PRATICOLA INDICA*, Blyth.

Seen about the fields near Kiungchow city early in February.

82. *RUTICILLA AUROREA* (Pall.).

About the gardens of the capital city in February.

83? *CALAMOHERPE FUMIGATA*, Swinhoe, P. Z. S. 1863, p. 293.

On the 27th February, on my journey outward, I ran into a wood at the foot of a hill, and was attracted at once by the sweet song of some Warbler hidden in the bushes. I watched awhile for him. He flew out and perched for a second on the

stump of a tree, stooping and throwing up his tail. In another second he was away, and I lost him. He looked very Nightingale-like, and more like this species than any other I am acquainted with.

84. *CALAMOHERPE CANTURIANS* (Swinhoe, Ibis, 1860, p. 52).

85. *CALAMOHERPE MINUTA* (Swinhoe, Ibis, 1860, p. 52).

Both these were frequently seen and heard in February about the gardens and villages near Kiungchowfoo.

86. *PRINIA SONITANS*, Swinhoe, Ibis, 1860, p. 50.

Seen about the gardens at Kiungchow city, and at Nychow (S. Hainan). It also occurred in the Luichow Peninsula.

87. *DRYMÆCA EXTENSICAUDA*, Swinhoe, Ibis, 1860, p. 50.

Common amongst the tall grasses. My single specimen is similar to some of the Amoy ones.

I got the Tailor-bird (*Orthotomus phyllorhaphus*) in Naochow Island, but never saw or heard it in Hainan.

88. *CISTICOLA SCHÆNICOLA*, Bonap.

Occurred on the grassy hills. I have two specimens.

89. *PHYLLOPNEUSTE FUSCATA* (Blyth).

Often met with in Hainan. I also saw it in the Luichow Peninsula.

90. *PHYLLOPNEUSTE PLUMBEITARSUS* (Swinhoe, Ibis, 1861, p. 330).

Willow-Wrens were often seen on the west coast of Hainan towards the end of March. Both my specimens are of this species.

91. *REGULOIDES SUPERCILIOSUS* (Gm.).

Common in February. I brought away one specimen.

92. *REGULOIDES PROREGULUS* (Pall.).

I saw a few in the gardens about the capital city in February.

93. *MOTACILLA FRANCISI*, Swinhoe, P. Z. S., 24 Feb. 1870.

I shot two Wagtails in Hainan similar to our ordinary white-faced Chinese Wagtail, but with black on the ear-coverts. The birds were not fully developed, and I should have had

merely to note the peculiarity and pass on; but more recently, in my trip to Szechuen, I procured a male in full summer plumage of evidently the same species. I give a note of its characters:—Length of wing 3·55 in., of tail 3·7, of tarsus ·93. General colour the same as in *M. felix*. Its main difference lies in the black being more advanced towards the forehead in line with the front corner of the eye, then stretching back, leaving a white eyebrow, and advancing at a sharp angle over the ear-coverts to the rictus of the bill—an intervening border between it and the eye, and the throat, remaining white. The face is marked much as in the second figure of the Grey-backed *M. personata*, in Mr. Gould's 'Birds of Asia.' The older Hainan bird has a long white blotch of white on the inner web of the third outer rectrix, which is wanting in the younger and in the Szechuen bird. I believe the Szechuen and the Hainan birds to be of the same species.

94. *MOTACILLA OCULARIS*, Swinhoe, P. Z. S. 1863, p. 275.

This Grey-backed Pied Wagtail, which occurs in China from Canton to Pekin, appears also to be tolerably common in Hainan. I have three skins from that island.

95. *CALOBATES BOARULA* (Temm.).

Not common. I shot one specimen.

96. *BUDYTES TAIVANUS*; *B. flavus* (L.), var. *rayi*, Swinhoe, Ibis, 1863.

I shot two out of a party of Yellow Wagtails at Heongpoo (W. Hainan) on the 26th of March. They are assuming the yellow under dress, their heads are still dull olive tinged with green, with the yellow eyebrow distinctly marked. They are the same as the Formosan bird, which I have sometimes procured at Amoy. This species is to be distinguished from *B. rayi* by its dark olive lores and ear-coverts, and duller plumage.

97. *BUDYTES CINEREOCAPILLUS*, Savi.

This I shot on West Island (S. Hainan) on the 15th March, in full summer plumage. Head deep grey, with a black line from rictus to ear-coverts; a small white spot in front of the eye; chin and base of lower mandible white, underparts fine

bright yellow. I have a specimen from Amoy, and another from Tientsin.

98. *PIPASTES AGILIS* (Sykes).

Frequents groves. I found it at most of the places we visited. I presume it is only a winter visitant here, as in Southern China.

99. *CORYDALLA RICHARDI* (Vieill.).

Common. I have two, which are moulting into a rich ochreous plumage, and seem to be the smaller race referred to by me in my "Catalogue of the Birds of China" (P. Z. S. 1863, pp. 272, 273).

100. ? *CORYDALLA RUFULA* (Vieill.).

On the banks of the Kiungchow River I saw with the former a smaller and more active species, of the same colour. This I take to have been *C. rufula*; but, unfortunately, I could not spare time to procure a specimen.

101. *ANTHUS CERVINUS* (Pall.).

Often met with in small parties. On the 23d of February I got one in winter plumage, and on the 26th of March I shot two, the first with the face only rufous, the second in nearly full summer-dress, the underparts being pinkish fawn-colour, with only a few streaks on the flanks.

102. *HERPORNIS TYRANNULUS*, sp. nov. (Plate X.)

In Central Hainan I noticed this remarkable little bird on several occasions. They went about the high trees of the forest in small parties, very lively in their movements, and hanging about the twigs in all attitudes, hunting for insects just like Titmice, raising their crests the while, fighting with one another, and uttering loud querulous notes. In death they look *Ixine*, but in life they are decidedly *Parine*. I have two specimens from Hainan which agree with Formosan examples. They closely resemble *H. xantholeuca*, Hodgs., of Nepal, but differ in having the green of the upper parts tinged with a brighter yellow, and in the bill being smaller. Upper parts yellowish olive-green, brighter on the back and rump. Coronal feathers long and broad, with blackish shafts. Lore, circle of eye, cheeks, sides of neck, and underparts light brownish-grey,

whiter on the throat and belly. Feathers of the wing hair-brown, margined with yellowish-green, yellower on the quills. Tail greenish-yellow, washed lightly with brown and with thin brown shafts. Carpal edge of wing white. Axillaries, under edges to remiges and rectrices, and vent sulphur-yellow.

Length about 4·5 in., wing 2·6, tail (of 12 mucronate feathers) 1·8, bill from front ·46, tarsus ·57.

Herpornis seems to me to connect *Zosterops* with *Liothrix*.

103. *ZOSTEROPS SIMPLEX*, Swinhoe, P.Z.S., 1862, p. 317.

I met the White-eye in all parts of Hainan, and procured several examples, which do not differ from the South-China bird. The most striking distinction between this and the *Z. palpebrosus* (Temm.) of India is in the latter being larger and having the green of the upper parts much yellower.

104. *PARUS CINEREUS*, Vieill.

The only Titmouse observed by me in Hainan. I have three skins which seem to agree to a feather with a specimen from India given to me by Mr. Blyth. The Chinese bird, as I have before noticed (Ibis, 1868, pp. 63, 64), is intermediate to the Indian and Japanese species.

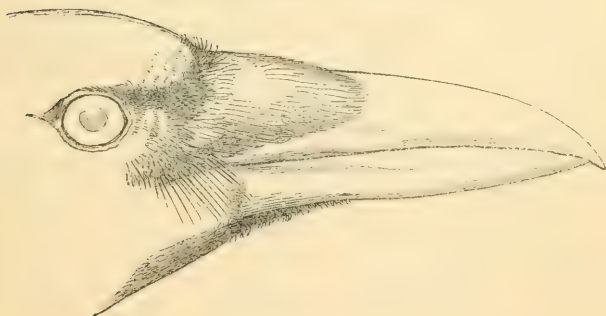
105. *CORVUS SINENSIS*, Gould.

On Naochow island we saw five Crows. All had small bills; and the one we shot and brought home has turned out to be *C. corone* of Europe. I was therefore not a little surprised to find the common and familiar Crow of Hainan to be a large-billed species. Mr. Tristram determined the Naochow bird and called my attention to an Andaman Crow sent me by Mr. Blyth. The Andaman Crow, however, I find to be of the *C. culminatus* group. *C. corone* did not occur in Hainan. The bill in the Hainan race attains a maximum size, and the wings and tail are longer; but all these vary in my specimens from Swatow, Foochow, Ningpo, and Peking. The Formosa bird, however, has the large bill of the Hainan race, with shorter wings. This I have separated as *Corvus colonorum* (Ibis, 1864, p. 427). I have the *C. japonensis*, Bp., from Hakodadi and Amoorland. It has a strongly curved and differently shaped bill, and is a larger bird.

Corvus sinensis.



Corvus corone ♀ ex Naochow.



Corvus sinensis.

Hainan.	♂.	Bill from gape	3,	depth	1·1	; wing	14·25	; tail	9·25
"	♂.	"	3	"	1·1	"	14·25	"	9·6
"	♀.	"	2·6	"	·9	"	13·8	"	8·5
"	♀.	"	2·8	"	·9	"	13·5	"	8·8
Swatow.	♂.	"	2·65	"	·95	"	13·25	"	9
"	♀.	"	2·5	"	·92	"	12·6	"	9
Ningpo.	♀.	"	2·45	"	·85	"	12·	"	8·25
Peking.	♀.	"	2·5	"	·9	"	13·1	"	8·75

Corvus corone.

Naochow.	♀.	"	2·25	"	·7	"	12·6	"	7·4
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The Hainan Crow is nearly as common and familiar in Kiungchow and other towns of the island as *C. splendens* is in Calcutta. They collect about the housetops, fighting and cawing, and drop into the courtyards, often even entering houses, picking up offal or any thing that takes their fancy. They roam about the neighbouring fields in large parties, and crowd together on the trees. The natives do not molest them; and this may account for their boldness, as in China the Black Crow prefers retired places in woods and hills, and rather shrinks from the presence of man. They appear to breed late in Hainan. About the middle of February we noticed them carrying about sticks for building-materials. From their peculiar habits I took the Hainan bird to be distinct from the China Crow; but I find nothing in their skins to justify separation. Its cry may be syllabled "Ah-ah! Kao-kao!" the latter uttered in a hoarse voice.

106. *CORVUS TORQUATUS*, Less.

In the plains of the north and north-west of Hainan this bird frequently occurs. I shot three specimens, which do not differ from Amoy examples. Their plumage is much abraded and discoloured from their nesting-duties, and it is evident they are as early breeders in Hainan as in South China.

Du Halde, in his 'Description de la Chine,' (*loc. cit.*) gives this species. He says, "several curious birds are also found there, such as Crows with a white cravat," &c.

107. *PICA MEDIA*, Blyth.

The Magpie was everywhere abundant in Hainan, following

the Chinese colonist and gladdening his heart with its lively movements and auspicious notes. It was breeding in February; and we frequently saw its nest, often placed in the basket-shaped cross-trees of the poles that stand in front of mandarin offices, and once, as I noticed in the preamble that heads this paper, in the heart of the leaf-crown that tops the cocoa-nut tree. According to the Chinese 'Gazetteer' of Hainan, the Magpie was introduced into Hainan A.D. 1450-56, from the Chinese main. It says, "'Tcheo,' commonly called the 'Bird of rejoicing.' Hainan was originally without this bird. In the King-tai reign of the Ming dynasty, Admiral Le-yih brought from Haipih [north of the sea, applied to Leen-chow-foo, at the head of the Gulf of Tonquin] ten or so males and females and let them loose. These having bred freely, the bird has become extremely numerous." The two examples I procured in Naochow island are bright and very similar to the Amoy bird, but have the white on their quills more extended towards their tips, but not so much as in the Peking bird. My two Hainan specimens have the white much as in Amoy skins. They are dull-coloured; but they were shot later in the season, and are worn from nidification.

Hainan.	♂.	Wing	7.25;	tail	9;	tarsus	2.08
"	♂.	"	7.7	"	9.25	"	2.08
Naochow.	♂.	"	7.7	"	9.25	"	1.85
"	♀.	"	8.6	"	10.5	"	2.25
Amoy.	♀.	"	8	"	9.75	"	1.85
Peking.	♀.	"	8.25	"	9.7	"	1.9

108. DENDROCITTA SINENSIS (Lath.).

On the 17th of February, on my way to Shuy-wei-sze (Central Hainan), a pair of these flew on to a tree by the wayside. I was out of my chair in a second, and secured one: "iris deep chestnut." Among the fine woods of Shuy-wei-sze they were not uncommon, going about in small parties. On one occasion I was attracted by a noise as of Jays quarrelling. I peered about to see what it was, and found a male of this species. He was standing on a twig close to his mate, and, leaning towards her, kept uttering the horrid barking noise that disturbed me. The mate was evidently love-stricken; for, by her quiet and attentive demeanour, she seemed enchanted with his music.

I have five specimens; and comparing these with two from the Province of Fokien (Tingchow Mountains) the Hainan race appears to be smaller, and browner, with the grey of the hind neck mixed with brown. The size of the small white wing-patch is somewhat variable. The Formosan race is distinct and is easily recognized by its larger size, and by the ashy grey on the basal half of the rectrices. This I have separated as *Dendrocitta sinensis*, var. *formosæ* (Ibis, 1863, p. 387). The Himalayan bird is the largest of all, and constitutes the *D. himalayensis*, Blyth (Ibis, 1865, p. 45).

I add the comparative measurements of the Hainan and Chinese birds.

Hainan.	Wing	5·2;	tail	7·1
"	"	4·9	"	6·5
"	"	4·9	"	6
Tingchow.	"	5·4	"	7·6
"	"	5·3	"	6·7

109. *ACRIDOTHERES PHILIPPENSIS* (Temm.), Bp., Cons. Av. i. p. 420. (Ibis, 1867, p. 387).

Differs in no respect from the bird (*A. cristatellus* of my former lists) that ranges from Canton to Shanghai. It was abundant about all towns and villages visited in Hainan.

Du Halde (*l. c.*) mentions this bird among the productions of Hainan, "Starlings which carry on their beak a small *lunette*."

110. *TEMENUCHUS SINENSIS* (Gmel.).

We first met this summer Starling on the 6th of March, on the Chinlan river (N.E. Hainan). On the 13th March, at Yu-lin-kan it occurred in large flocks; and after that, all the way round to Kiungchow-foo, they were often seen. I judge from this that they do not spend their winter in this island, but visit it in spring, passing onwards to summer in south China, some probably remaining during the warm season.

111. *STURNUS CINERACEUS*, T. & S.

These were often observed in small parties during February. Later in the spring we did not find them. They only occur in South China during the winter.

112. *EULABES HAINANUS*, sp. nov.

I frequently saw Grackles in cages in the towns of Hainan,

and was assured that they were indigenous to the island, but I searched in vain for the bird in its wild state. I took a caged specimen to Hongkong and compared it with the species sold in the shops there, which, as the Chinese report, comes from South-western China (Western Kwangtung, Kwangse, and so forth). The Chinese race has never been described, and we may for convenience' sake designate it

EULABES SINENSIS.

It is smaller than *E. intermedius* (A. Hay) of Tennasserim, has a smaller bill, and very narrow nuchal flesh-lappets. The naked skin below the eye is about .7 in. broad, and in shape nearly square. Its colours seemed to agree with those of the Tenasserim bird. The Hainan bird I placed alongside a Chinese specimen. They were both alive and I could not note their proportions; but they resembled one another greatly, and the only character I could fix for their discrimination was the subocular fleshy skin. The Hainan bird had it narrow, .25 in.; and the skin was lengthened downwards, and not square. I examined several of the Chinese form, and they all agreed in having it square-shaped. On this peculiarity I venture to separate the Hainan race; for my single specimen was left in charge of a friend, in whose hands it died, and, notwithstanding all my careful instructions, it was thrown away.

In the Chinese work on the Kiungshan District of Hainan the following occurs: " 'Tsin-ke-leao' [*Eulabes*, sp.]. South of the Meiling [mountains north-west of Canton city] there is a bird in appearance like the 'Keu-kuh' [*Acridotheres*], but larger and violet-black. The sides of its head have yellow flesh. It has a crimson bill and yellow feet, man's tongue, and man's eye; below the eye connecting with the neck is a deep-yellow patch. White examples also occur. Its eye is of three kinds. The yellow-eyed is the 'Golden Grackle,' and is the best. The white-eyed is the 'Silver Grackle,' and stands next. The black-eyed is the 'Iron Grackle,' and is the most inferior. Kept long it can learn man's words. It is vulgarly called 'Leao-ko.' It bears also the name 'Han-kin' [Bird of Han] ”.

Du Halde (*op. cit.*) mentions this bird as follows: " Merles

of a deep blue, which have two yellow ears raised half an inch, which speak, and whistle perfectly well."

The *Gracupica nigricollis* (Paykull) of South China did not occur in Hainan, though it is found in Siam.

113. *MUNIA TOPELA*, Swinhoe, 'Ibis,' 1863, p. 380.

114. *MUNIA ACUTICAUDA*, Hodgs.

Both these were common. My specimens of the latter are darker on the head and breast, like the Burmese and Formosan race, which differs in this respect from the Chinese bird.

115. *PASSER MONTANUS* (Linn.).

The domestic Sparrow, as usual, in these parts.

116. *EMBERIZA FUCATA*, Pall.

On the cleared grass-covered hills of Lingmun (Central Hainan) I shot three specimens of this Bunting on the 23rd of February. They were in company with Larks, Pipits, and other birds of cultivation.

117. *EMBERIZA SPODOCEPHALA*, Pall.

Common about gardens in February.

118. *EMBERIZA AUREOLA*, Pall.

On the 29th of March, at Haosuy (West Hainan), we got a fine male of this species.

119. *ALAUDA CÆLIVOX*, Swinhoe, Zool. 1859, p. 6724.

The little Sky-Lark was common in all cultivated parts of Hainan. I met it even in Lingmun (Central Hainan). From this last place I have the typical bird as found at Amoy. But from Hoitow (West Hainan) I have two examples with a longer and more arched bill, and with the hind claws very long. The feathers of their crowns, too, are longer and broader, and the upper feathers generally larger. Bill from forehead .58 in., from gape .67; tarsus .94; hind toe .42, its claw .85; wing 3.7; tail 2.5. These agree with my specimens of the Lark of North Formosa, of which I have a large series. I propose to name this race *ALAUDA SALA*.

120. *OSMOTRERON DOMVILII*, sp. nov.

During my few days' stay in the interior of Hainan I several times came across this little Green Pigeon, generally in pairs or small parties, keeping to the tops of high trees. I shot two

pairs. The iris has a circle of fine blue round the pupil, with a broad outer one of golden yellow. The basal half of the bill is fine blue, the apical half pale greenish-blue. I saw a Green Pigeon at the south end of the island, but I cannot be sure that it was of this species. It is closely allied to *O. bicincta*, Jerdon (B. Ind. iii. p. 449), but differs by its smaller size, by its forehead and throat being green, by the grey on its nape being small, in the form of a round spot, and not extending to the sides of its neck, and the much brighter yellow on its belly and underparts. Length about 9 inches; wing 6; tail 3.75.

The female is rather larger than the male, has the nuchal grey still smaller, wants the lilac and orange pectoral bands, and has the under tail-coverts very pale cinnamon. Length about 9.5 in., wing 6.3, tail 4.

I name this species in honour of Lieutenant Domville, R.N., who commanded the gunboat 'Algerine,' in which we made the cruise.

121. CARPOPHAGA SYLVATICA, Tickell.

At Shuy-wei-sze (Central Hainan) on the 18th of February, as I was passing a farm-house, one of these monster Green Pigeons alighted on a tree in a paddock alongside. It was not timid, admitting of close approach. Its irides were dark pink. I did not come across the bird again till we got round to Hung-pe (West Hainan) on the 30th of March. On shore there, among the tall trees near villages, we found a small party of them and secured five. The irides of these I noted as "crimson." The birds were excellent eating. I have compared my specimens with skins from India, and can find no notable difference. Wing 9 inches, tail 6.

122. MACROPYGIA TUSALIA (Hodgs.), var. MINOR.

At Tai-ping-sze (Central Hainan) this fine Dove was one of the commonest, occurring in all the large woods. Its coo is like that of the English Turtle, but more hurried and harsher. It is called by the Chinese there the "Luy-vong-tuy" (the Thunder-king's Dove). I shot several, of both sexes. The iris is composed of two circles, the inner one narrow and white, the outer broad and purplish-pink. The female and immature bird

carry bars on the underneck and breast, which disappear in the adult male. It was also pretty common in the jungle at Nychow (South Hainan).

My specimens are smaller than Himalayan skins, and the reflections on the hind neck have more pink and less green; but if too close for specific separation, they are worthy at least of the rank of a variety. A male from Hainan measures 13 inches, wing 7·27, tail 7·3; a female 12·5, wing 7·2, tail 6·8.

Du Halde (*op. cit.*) says, of the Hainan *Columbidæ*, "they have Turtle Doves in abundance, and two species of Cushats."

123. *TURTUR RUPICOLA* (Pall.); *T. gelastes*, T. & S. Faun. Jap.

A few of these were about the neighbourhood of Kiungchow city in February.

124. *TURTUR CHINENSIS* (Scop.).

I thought to have met the *T. tigrinus*, Temm., of the Straits; but everywhere in Hainan the common species was the bird that ranges from Canton to Shanghai. The skins I have brought back do not differ from Chinese examples. This Dove is called by the Hainan Chinese "Ko-tuy," the dialectic rendering of the Amoy "Ka-tsy."

125. *TURTUR HUMILIS* (Temm.).

I shot a pair of these near Kiungchow city on the 10th of February, and saw them later in other parts of the island. They were not common.

126. *CHALCOPHAPS INDICA* (Linn.).

On the 27th of February at Shuy-wei-sze (Central Hainan) I saw and procured the only specimen of this lovely little Pigeon. It flew up from the ground and perched on the low branch of a tree. It is an adult male, differing from the skins from India and Ceylon that I have seen in being of a darker purple on the breast and belly, and in wanting the violet edgings to the feathers of the hind neck; but in a series of the former I find both the tints of the underparts and the amount of violet on the hind neck variable in intensity and extent, and I will not attempt to separate the Hainan bird on the peculiarities of a single specimen. Its wing measures 5·85 inches, its tail ·4, and its tarsus ·92.

127. *GALLUS FERRUGINEUS* (Gmel.).

I fully believed that Hainan would yield a Pheasant of some kind, and I never ceased inquiring of the natives whether "Hill-fowl" (the usual expression for Pheasants) were found among their woods. The reply was in the affirmative, and I eagerly looked out for them. Judge my disgust, then, when I discovered that the wonderful "Hill-fowl" was only a wretched Jungle-cock. Though greatly disappointed, in heart I was still pleased to make the acquaintance of a bird that I had not met before. On the 18th of February I was rambling in the early morning at Shuy-wei-sze (Central Hainan), and stepped through a hedge into a field at the further end of which was growing a patch of sweet potatoes. A rustic who was with me pulled me by the sleeve and cried "Twa kai" (Hill-fowl). I turned, expecting of course to see a Pheasant. The clod-hopper was pointing at an ordinary-looking rooster standing in the middle of the field with body erect and tail decumbent. Seeing me take no notice, the native cried out again, "Shoot, it is a wild bird, and not a barn-door fowl." I looked again and saw the bird moving away behind a hedge. When I got in view of him again, he ran for the hedge with all speed. There was no waddle in his gait, and I then saw that it was a wild bird. I fired and ran up. The wounded bird flapped and tumbled about precisely as a cock does when its neck is broken and it is thrown down to die. My heart misgave me; I thought I had shot some poor peasant's fowl; but I was wrong, every one I met told me that it was a genuine wild fowl, and on carefully examining it I found it to be so. Unfortunately neither its hackle nor its tail were fully developed. Its comb was small, and its spurs wart-like. Its iris was orange-yellow. Skin under the ear cream-white, purplish pink at its forward corner. Bill ochreous, brown on culmen. Legs brownish-grey, tinged with purple. Its intestines measured 3.5 feet; and its stomach contained sweet potatoes, vetches, and stone-grits. Its flesh was juicy and delicious eating, and quite different in flavour from that of the Barn-door. Its *testes* were of an enormous size; so that there can be no doubt the bird was breeding. On the 27th of February I visited the same field again; and on the same spot

where I first saw the cock, appeared the hen. Several natives were with me. They shouted "Hó hó Twa kai" (look, look ! Hill-bird) ; and at the noise the hen rushed into the hedge, and we tried to beat her out in vain. She seemed to be of a deep brown colour, and in running kept her head low and her tail partly erect.

At Lingshuy (S.E. Hainan) we found grave-mounds on the edge of the jungle strewn with cock's feathers, as if the wild fowl were in the habit of meeting on the mounds to fight. At Yu-linkan (S. Hainan) I heard them repeatedly chuckling in the jungle quite close to me ; but there was no getting a shot at them. In the dense woods about Nychow (S. Hainan) they were particularly common, and we heard and saw them often. When put up in the open, they make at once for the covert, flying heavily, with the body and tail nearly perpendicular. I saw a Le man put a cock bird up ; and marking it drop into the wood, I hastened to the spot. It gave a crow "tok-tok tok tok chea"—as a domestic hen does when frightened. My follower raised it from the thick bush with a stone ; it flew a short distance, and fell again into the thicket. Our party returned to the boat without a Jungle-fowl ; and we saw no more of them in the course of our cruise.

The single male specimen that I have brought home is sufficient to show, from its black underparts and its general colouring, that the Hainan bird belongs to the ordinary species. The small hackles of its neck, however, are richer chestnut than in my Indian examples, and the feathers of its rump a much brighter red. But these vary in the different races of this bird, and my specimen is too undeveloped for close comparison.

I may mention that I noticed that the poultry of the villages on the outskirts of the jungle were very like the wild fowl, though I could not learn from the natives that they actually crossed. I considered this an important fact when I first observed it, as I was then under the impression that the Hainan Jungle-cock was a peculiar species. But in the case of *G. ferrugineus* this has already been noted by Mr. Blyth.

Du Halde ('Description de la Chine,' i. p. 230), mentioning

the Game Birds of Hainan, says, "There is there a Jungle-cock, which is of an exquisite taste."

The Chinese 'Gazetteer' remarks, under the characters "Shanke" (or Hill-fowl), "Loves to see its plumage reflected in the water, when it dances. During the reign of the Emperor Woote, of the Wei dynasty [A.D. 499-514], the southern regions presented this bird as tribute. If a large mirror be placed before the fowl, he sees his form reflected and dances without stopping."

A mandarin in Hainan informed me that Lui-chow-foo (the peninsula opposite to Hainan) produces a bird like a fowl, with longer legs, called the "Luy-kung-tsai" (Child of Lightning). This may interest some*.

128. FRANCOLINUS SINENSIS (Osbeck).

F. pintadeus (Scop.); *F. perlatus* (Gmel.).

The South-China Francolin was common everywhere in Hainan, and we repeatedly heard its loud note. At Lingshuy (S. E. Hainan), I bought three males from a Chinese bird-catcher. He had caught them by a slip noose, with the help of a decoy bird. On our return to the capital (2nd April) we found them extremely common about the grave-covered plains, and often saw, as we passed along the road from the sea-port to the city, a cock Francolin perched on the top of a grave-mound shrieking out its loud call. The Hainan skins are similar to those from South China.

The Chinese 'Gazetteer' says of this bird, "the 'Chay-koo'

* It would be as well here to remark on the Peacocks which I saw in an aviary at the residence of the Governor of Hainan, and thought (Ibis, 1868, p. 353; P. Z. S. 1868, p. 530) were *Pavo nigripennis*, Scater, from the blackness of their wing-coverts. These birds, the Governor informed me, came from Cochin China, and had, as far as I can recollect, a crest shaped like that of *P. muticus*, and not like that of *P. cristatus*. I find, on my return to England, that Mr. Scater's bird has the latter; and therefore I regret that I was so hasty in identifying the Cochin-Chinese bird with the *P. nigripennis*. On my last visit to England, I took note of the then new species; but my attention was not called to the shape of its crest, and I was led rather to regard the difference of its wing. Hence it is likely that the Cochin-Chinese species may be *P. muticus* after all.

[Francolin], when flying, is obliged to turn towards the south. Its cry sounds 'Kow chow kīh tīh'. It also says, 'Hing puh tīh yáy, kó-kó' [It is indeed of no use, my brother!]"

129. EXCALFATORIA CHINENSIS (Linn.).

On a grassy hill at Lingmun (Central Hainan) I fired at an *Emberiza fucata*, and put up three of these little creatures from quite close to me. I saw distinctly that they were two males and a female of this species. I may add that the female is the bird that I described before as *Coturnix caineana* from Swatow (Ibis, 1865, p. 351).

130. ?TURNIX MACULOSA (Temm.).

I flushed a *Turnix* also at Lingmun, and at Nychow (S. Hainan) saw several rise from the dry grass outside the jungle. We did not pick up a single bird. The Lingmun bird looked like the *T. maculosa*; but it is not easy to determine one of this genus without actual handling.

131. SQUATAROLA HELVETICA (Linn.).

A specimen of the Grey Plover was shot on the mud of the Hungpe lagoon (W. Hainan) on the 30th of March.

132. CHARADRIUS LONGIPES, Temm.

This Golden Plover was common in the marsh near the city on the 5th of February. We found it in the dry rice-fields of Paklai (W. Hainan) on the 21st of March, and abundant among the sweet-potato gardens of Hoitow (W. Hainan) on the 23rd of March. On the 2nd of April, at the port of Kiungchow, we found them on the beach; they were then beginning to acquire the black underdress of summer.

133. ÆGIALITIS GEOFFROYI (Wagler).

On the mud of the creek at Paklai (W. Hainan) I shot a specimen of this large-billed Sand-Plover.

134. ÆGIALITIS MONGOLICUS (Pall.).

On the 7th of March, on the Chinlan river (N. E. Hainan), we shot one of these out of a small party that were about the sandy banks, and on the 30th of the same month I got another at Hungepe (N. W. Hainan). They were both in winter plumage. I have never found it on the south coast of China; but in

Shanghai a number of them, with many of *Æ. geoffroyi*, were hanging up in the market on the 18th of May, all in more or less complete summer plumage. The Hainan and Shanghai birds agree in proportions, and are evidently of the same species as that figured by Middendorff from the Amoor.

135. *ÆGIALITIS DEALBATUS*, Swinh., P.Z.S. 1870, p. 138.

The true Kentish Plover we did not obtain on the coast of Hainan, but the resident form of South China, which I have lately separated. All the five specimens which I brought away are of this pale-legged race.

136. *ÆGIALITIS INTERMEDIUS* (Ménétr.).

We shot one little Sand-Plover in Hainan which agrees with South-China and Indian specimens, and is of the same species as the larger of the two European smaller Ringed Plovers. The true *Æ. curonicus* I have not met with in China.

137. *HOPLOPTERUS VENTRALIS* (Wagler).

On the 18th of March, at Lingshuy (S. E. Hainan), we were riding along the bank of the little river that discharges into the lagoon, on our way to the Hien city, when I noticed a Kite pounce down on something on a little sandy island. The something attacked was a bird, which flew up with an angry cry, and struck at the Kite with its wings. It looked like a small Grey Harrier. I at once waded my pony across, and, dismounting, made for the spot. The Kite's quarry turned out to be a large Plover. Its mate was not far off, and, with the help of my comrades, I secured the pair. I was delighted to find that they were *Hoplopteri*, with long black crests, and a fine black spur on each carpal joint. The iris was of a deep rich brown. My specimens (♂ and ♀) are of the same size and colour, and do not differ from Indian examples.

138. *STREPSILAS INTERPRES* (Linn.).

We found large numbers of these in the Poochin river (N.W. Hainan) on the 5th of March. They sat on the fishing-stakes, and ranged themselves in rows on the ropes that ran from stake to stake. The four specimens I brought away are all acquiring the summer plumage.

139. *GRUS CINEREA*, Bechstein.

I have before noted that the Common Crane occurs in small parties every winter on the sand-flats of Swatow. In Naochow and Hainan they were very abundant, and we often had opportunities of watching them. They are prized as food by the natives, and the soldiers shoot at them, which renders them wild and difficult of approach. They feed largely here on sweet potatoes. It was only on the plains and open parts of the country that we saw them. They did not occur south of the mountains. The last flight we noticed was on the 23rd of March, at Hioitow (W. Hainan).

The magistrate at Lingmun informed me that "Cranes are born in pairs and mate for life. If one is born singly he remains a bachelor all his days, and becomes sentinel to the flock. This is a hard duty to perform; for if the sentinel gives a false alarm he is beaten, and if he does not give the alarm soon enough he is also beaten."

The Chinese 'Gazetteer' remarks on the abundance of Cranes in Hainan, and their scarcity in other parts of the Canton province.

140. *GALLINAGO STENURA* (Temm.).

We met this Snipe everywhere in Hainan during the whole of our stay. The females are larger than the males, more mottled beneath, and have the pin-shaped lateral rectrices longer and broader.

141. *GALLINAGO SCOLOPACINA*, Bp.

The Common Snipe was found in small parties in the marsh near the capital in February.

142. *RHYNCHÆA BENGALENSIS* (Linn.).

Often flushed.

143. *LIMOSA UROPYGIALIS*, Gould.

A pair were shot out of a party of Godwits feeding in the shallows of the creek at Hungpe (N. W. Hainan) on the 30th of March; these are nearly in full summer plumage. Later, on the 2nd of April, a solitary bird was picked off the sandy shore of Hoehow harbour; this is in the winter dress.

144. NUMENIUS MAJOR, T. & S.

On our road to Lingshuy city (S. E. Hainan), on the 11th of March, I shot a solitary female of this species feeding in a stream. They were common enough in Hoehow harbour up to the beginning of April; and we got a female there on the 5th of February. The March bird was tinged with yellowish-chestnut on the dark parts of the upper plumage, showing that it was acquiring its summer dress.

I may here note that I have lately ascertained for a fact that the shorter-billed bird, which I before identified with *N. arquata* of Europe, is the male (the long-billed being the female) of *N. major* of Japan and China.

145. TRINGA ALPINA (Linn.).

In flocks on the Hoehow marsh.

146. TRINGA ALBESCENS, Gould.

A single specimen of this was shot on the Hungpe mud-flats on the 30th of March.

147. TRINGA PLATYRHYNCHA, Temm.

Shot on the Hoehow marsh, February 5th.

148. CALIDRIS ARENARIA (Linn.).

Shot in the Hungpe creek, March 30th.

149. LOBIPES HYPERBOREUS (Linn.).

As we were leaving Hungpe, four of these little birds flew towards the ship, and sat floating on the water close to her. On the 4th of April, on the shore of the Luichow peninsula, I saw one floating on a little pool caused by the tide overflowing a hollow in the sands. This specimen I secured.

150. TRINGOIDES HYPOLEUCUS (Linn.).

Common everywhere about water.

151. TOTANUS GLAREOLA (Gmel.).

On the 2nd of April we found the Wood-Sandpiper common in the springing rice near the capital; and plenty of them were being hawked about the city.

152. TOTANUS OCHROPUS (Linn.).

Seen on the Hoehow marsh.

153. *TOTANUS GLOTTIS* (Linn.).

Often seen, and many shot. On the Hoehow marsh in flocks of thousands. One specimen bagged had the under parts stained pink; it had probably been paddling about in the slough from some dyeing-establishment. The Chinese in Hainan often stain their white poultry with this colour.

154. *TOTANUS STAGNATILIS*, Bechst.

A party of them observed on the Hoehow marsh, on the 5th of February.

155. *TOTANUS CALIDRIS* (Linn.).

One of these was shot out of a party on the same marsh, and on the same date as the last mentioned.

156. *GALLINULA PHENICURA* (Pennant).

This Moorhen was common everywhere about the low lands. I saw it on the ponds within the walls of Kiungchow city, and frequently in the country in its neighbourhood. Also at Heongpoo (W. Hainan).

157. *LEPTOPTILUS JAVANICUS* (Horsf.).

Noticed on several occasions in the interior of Hainan about the moist paddy-fields, and about streams and ponds, always alone. The most intimate acquaintance I made with it was on the 24th of February, at Lingmun (Central Hainan). I was with my gun strolling up a grassy hill, when I noticed a Chinese gentleman coming in my direction in a sedan-chair. He suddenly had his chair put down, and spoke to one of the bearers, who came running to me and pointed to a paddy-field close to it, crying "*Hoang*," the name in Hainan for this bird, and beckoning me to go to it. I looked and saw a fine Adjutant standing in the water among the sprouting rice at the edge of the field. I walked slowly up to him. He sprang up, but again settled. I did not fire. He rose again, and made as if he would settle again, but, changing his mind, spread his expanse of wing and sailed away, ascending in broad circles, and never coming again within gunshot. I was so fascinated with my close interview with this majestic bird that I lost the will to fire at him. His upper parts appeared blue-grey black, and

his under parts white. He had a bare head and neck, of a yellow colour.

158. *ARDEA CINEREA*, Linn.

Seen in all parts of the island.

159. *HERODIAS ALBA* (Linn.).

160. *HERODIAS GARZETTA* (Linn.).

Both common. I shot one of each as they stood together in the shallows of the main river near Tinggan city.

I may here note that, on the marsh near Hoehow, I saw, on the 5th of February, a small party of large white birds flying over out of gunshot. They were of the size and general appearance of *H. alba*, but with short legs. They were not *H. intermedia*, nor indeed, I think, Herons at all, though they had pointed bills. I cannot conjecture what they could have been. I only saw them on that one occasion.

161. ?*ARDEOLA PRASINOSCELES*, Swinhoe, Ibis, 1863, p. 421.

The Squacco Heron was abundant about the paddy-fields and moist places, but it had not yet begun its moult. I shot one; but in the winter plumage it is almost impossible to state its species. In measurements it corresponds with specimens from South China; but so does a specimen from Siam. The Siamese bird is, I presume, the *A. bacchus*, Bp., of Malacca*; ours may be the same. I therefore register it with a doubt. I have the *A. leucoptera* (Bodd.) of India in the winter plumage. It seems to have smaller legs, more of the size of those of *A. speciosa*, Horsf., of Java.

This bird is recorded in the Chinese 'Gazetteer' as "the 'Crane with waterproof clothes'†. Vulgar name, 'Paddy-field Cow-slave.' Plumage of a striped colour like waterproof coats. Usually in paddy-fields, following cattle and in their train seeking its food. Hence its common name."

162. *NYCTICORAX GRISEUS* (Linn.).

Often seen in large flocks.

* In the Paris Museum they have the true *A. prasinosecles* from Cochin China; so that the Hainan bird is pretty sure to be the same.

† The waterproof cloak of the Chinese is made of bamboo leaves, and has the appearance of the neck of the Squacco-Heron in winter plumage.

163. *ANAS PENELOPE*, L.164. *ANAS CRECCA*, L.

I did not come across any large tract of water in the interior of Hainan. On the rivers and marshy grounds near the coast, Ducks, even in February, were very scarce. We only noticed occasionally small parties of Wigeons and Teal of the two species named.

Du Halde (*loc. cit.*) remarks that in Hainan "Game abounds, and you can hunt there in every style. The Partridges, Quails, and Hares are not so good as those of Europe; but Snipe, Teal, and all the river birds are very good."

165. *PODICEPS PHILIPPENSIS*, Gmel.

Often seen on the small ponds and little streams in Hainan. I preserved one specimen.

166. *DIOMEDEA BRACHYURA*, T. & S.

Observed at sea off Hainan on various occasions during the cruise.

167. *LARUS NIVEUS*, Pall.; *L. canus*, var. *major*, Middend. Sib. Reise.168. *LARUS CACHINNANS*, Pall.; *L. argentatus*, var. *major*, Von Schrenck, Reis. Amurl.

In February Gulls were about the Hoehow harbour (port of Kiungchow), but I made them all out to belong to these two species. On the 30th of March we saw them again at Hungpe (N. W. Hainan); and on our return to the capital in April there were still some about. *L. crassirostris*, Bp. (*L. melanurus*, T. & S.), of Japan, does not appear to go so far south.

169. *STERNA CASPIA*, Lath.

Plentiful about the harbour of Hoehow in February and beginning of April. We often saw them sitting in large parties on the sand flats. I shot one, which has rather an immature wing. It has a white crown and occiput, covered with broad black streaks, the black mottling continuing all over the lores downwards to the rictus, and thence in a line to the ear-coverts. As the adult *S. caspia* has the black extending only to the nostril, and thence backwards, grazing the lower lid of the eye, I

thought the Hainan bird peculiar; but on looking through my Amoy series, I find that the adult in winter plumage, while it has the crown and lores mottled, has a black patch from the rictus to the ear-coverts. In a bird shot in March, with a bill much deeper red, this black has nearly disappeared, and the crown is much blacker; and, lastly, in another in full nuptial dress the white has returned to the space from the nostril backwards, as in a European specimen, kindly lent me for comparison by Mr. Cooke. This settles my doubt as to my supposed novelty, and adds a little information as regards the change of plumage in the true *S. caspia*.

170. *STERNA MELANAUCHEN*, Temm.

On the rocks near Hoehow.

171. *SULA FUSCA*, L.

On the 15th of February, up the main river near Tinggan city, I watched a Gannet soaring overhead. It was a clear sunny day, and I could see plainly that the bird was of this species.

172. *GRACULUS CARBO* (L.).

On the 28th of March, at Haosuy (W. Hainan), we saw a large party of Cormorants fly past. They looked like the ordinary species, which is the commonest one during winter in South China. Mr. Gould has shown me one of the same in full plumage received from Siam.

From the above list it will be seen that the avifauna of Hainan resembles more that of South China than one might expect in so low a latitude. It has, however, a close affinity to that of the Tenasserim countries; and only a few species seem to connect it with Formosa. I originally intended to discuss this subject in detail; but my materials are, perhaps, too scanty.

XXV.—*The Natural History of Quiscalus major*.

By ELLIOTT COUES, M.D., United-States' Army.

ALTHOUGH this bird is very abundant in some parts of the United States, its habits seem not to have been sufficiently in-

1870 Pl. X.



J. C. Keulemans del.

M. N. Harbeck imp.

HERPOTHYS TRANKULUS